



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/446,545	03/16/2001	Juergen Kockmann	P99,2690	2480

29177 7590 02/24/2003

BELL, BOYD & LLOYD, LLC  
P. O. BOX 1135  
CHICAGO, IL 60690-1135

EXAMINER
----------

WAITE, SCOTT A

ART UNIT	PAPER NUMBER
----------	--------------

2663

DATE MAILED: 02/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/446,545	KOCKMANN ET AL. 
Examiner	Art Unit	
Scott A. Waite	2663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 07 April 2000.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 11-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 11-20 is/are rejected.
- 7) Claim(s) 18 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 15 March 2001 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 12.
- 4) Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_

## DETAILED ACTION

### *Drawings*

1. Figure 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### *Claim Objections*

1. Claim 18 is objected to because of the following informalities: Claim 18 claims claim 18 as a parent claim. Examiner will assume claim 18 was meant to claim claim 16 as the parent claim for examination purposes. Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 11, 13, 16 & 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Rohani et al. (USPN 5,390,166).

a. As to claims 11, 13, 16 & 20 in Fig. 4 Rohani discloses a time division multiplex duplex method comprising transmission of data during active time slots (Fig. 4, details 41,43,45,47) and no transmission of data during inactive (Fig. 4,

details 42,44,45,48) time slots and changing of frequency after a time period having an order of magnitude of one time slot. See Col. 3, lines 28 – 67.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 12, 15,17 & 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rohani in view of Kockmann et al. (USPN 6,434,183 B1). Rohani discloses all the features of claims 12, 15,17 & 19 except for time duration for an inactive time slot of half an active time slot and also fails to explicitly point out use of the 2.4 GHz band.

b. As to claims 12 & 17, in Fig. 4 Kockmann teaches transmission time frames wherein inactive or “guard” time slots Z3, Z6, Z9 are half the duration of the active time slots to provide a maximum number of links. See Col. 6, lines 8 – 19). Therefore it would have been prima fascia obvious to one of ordinary skill in the art at the time the invention was made to extend the invention of Rohani to include the ration of 2:1 active to inactive timeslots when motivated to provide a maximum number of links.

c. As to claims 15 & 19, Kockmann teaches the 2.4 GHz band. Therefore it would have been prima fascia obvious to one of ordinary skill in the art at the

time the invention was made to extend the invention of Rohani to include the 2.4 GHz band when motivated to use a band well known in the art.

6. Claims 14 & 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rohani in view of Sakoda et al. (US 2001/0043583 A1). Rohani discloses all the features of claims 14 & 18 except for explicitly teaching four active time slots for transmission to the mobile station another four to the fixed station. In Fig. 2C Sakoda teaches four time slots 1, 7, 13 & 19 as reception time slots and four time slots 4, 10, 16, & 22 as transmission timeslots for an example wireless telephone system with multiple mobiles. Therefore, it would have been prima fascia obvious to one of ordinary skill in the art at the time the invention was made to extend the invention of Rohani to include four time slots in each direction when motivated to use the present invention in a wireless telephone system with multiple mobiles.

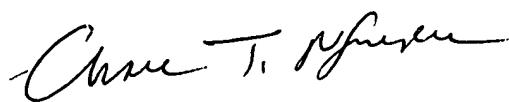
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott A. Waite whose telephone number is 703-305-7869. The examiner can normally be reached on Monday-Friday 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (703) 308-5340. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 308-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

Scott A. Waite  
Examiner  
Art Unit 2663

saw SW  
February 14, 2003



CHAU NGUYEN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600